

## AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please change the title to:

--Time Slot and Carrier Frequency Allocation in a Network --

At page 4, line 30, please insert:

-- **FIGURE 14** shows an illustrative time slot assignment algorithm for broadcast communications.--

Please rewrite the paragraph starting at page 7, line 24 as follows:

The lower blocks of **FIGURE 3** are used for data reception. AFE 350 receives a stream from one or more clients over the power line 116. This received data are fast-Fourier-transformed by FFT 360, demodulated by Demodulator 364 and converted to serial data by Parallel-to-Serial converter (P/S) ~~converter~~ 368. The result is de-interleaved by De-interleaver 372, error-corrected by Forward Error Correction (FEC) Decoder ~~decoder~~ 376 and sent to Bus Interface 304.

Please rewrite the first paragraph of page 8 as follows:

In a similar manner, received data from FFT 360 for a second data stream are fast-Fourier-transformed by FFT 360, demodulated by Demodulator 380 and converted to serial data by Parallel-to-Serial converter (P/S) ~~converter~~ 384. The result is de-interleaved by De-interleaver 388, error-corrected by Forward Error Correction (FEC) decoder 392 and sent to Bus Interface 304. As with the transmission side, if components 364 through 376 are ~~3376~~ fast enough to process two streams, components 380 to 392 are not required. PLC Interface ~~interface~~ 250, thus, simultaneously transmits or receives two independent data streams using different carriers, in accordance with certain embodiments consistent with the present invention.

Please rewrite the paragraph starting at line 11 of page 8 as follows:

**FIGURE 4** shows an exemplary embodiment of Client 108 or Client 112 (e.g., Client 108 is shown). A Power Line Communication Interface (PLC IF) 402 receives a data stream from server 104 and sends the received data stream to Decoder 406 through bus 410. Decoder 406 decodes the stream using its associated Memory 414. The resulting decoded video signal is converted to analog using Digital to Analog converter 420 for display on a Display 424. The resulting decoded audio signal is converted to analog in D/A 430, amplified in Amplifier 434 and sent to one or more Loudspeakers 440. PLC Interface 402 ~~interface 112~~ may include an encrypter and a decrypter (not shown) to encrypt transmitted data and decrypt received data. In this embodiment, all of the communication is encrypted before sending to the power line and decrypted after receipt from the power line 116.

Please rewrite the paragraph starting at line 23 of page 8 as follows:

The user can input commands using keypad 450 or remote commander 454. Keypad 450 sends command to a CPU 460 through interface 464 and bus 410. CPU 460 operates under control of one or more computer programs stored in Memory ~~memory~~ 466. Similarly, remote commander 454 sends commands to CPU 460 through interface 468 and bus 410. CPU 460 controls each component connected to or through bus 410. PLC Interface 402 can have the same components illustrated in **FIGURE 3**. If the client does not have to simultaneously send two streams, components 334 through 346 may be omitted.

Please rewrite the first paragraph of page 13 as follows:

If the stream is isochronous at 524, control passes to 532 (of **FIGURE 9B**). An asynchronous stream, which has lower priority than an isochronous stream will be stopped and instead the isochronous stream will get the time slot(s). Time slots assigned only for an asynchronous stream are checked at 532. If such a slot is found, the transmitter stops the asynchronous stream at 560. Then, the slot is re-assigned for the synchronous stream at 516 ~~at 564~~. At 568, another slot is re-assigned for the asynchronous stream by calling the current algorithm recursively. At 532, if no slot is available, the transmitter may indicate a busy

message on the display 218 and refuses the isochronous transmission at 540 and the process ends at 520.